REMARKS

Claims 1-15 and 33-47 were pending in this application, with claims 16-32 withdrawn from consideration. By way of this amendment and reply to the Office Action mailed August 28, 2002, claim 3 has been amended and no claims have been added or cancelled. Accordingly, Applicants submit claims 1-15 and 33-47 for reconsideration.

It is respectfully requested that this after-final amendment and reply be considered and entered, since: 1) it is believed to place the application in condition for allowance, and 2) at the very least, it is believed to lessen the number of potential issues for appeal.

In the most recent Office Action, claim 3 was rejected under 35 U.S.C. § 112, second paragraph, for the reasons set forth on page 2 of the Office Action. Claim 3, as amended, is now believed to be fully compliant with the requirements set forth in 35 U.S.C. § 112, second paragraph.

In the Office Action, claims 1-6, 10-13 and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Jahnke et al. (U.S. Patent 5,345,756) in view of Rice (U.S. Patent 4,571,935); claims 7 and 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Jahnke et al. in view of Rice, and further in view of Perkins et al. (U.S. Patent 5,160,096); claims 8 and 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Jahnke et al. in view of Rice, and further in view of Iwata et al. (U.S. Patent 5,327,718); and claims 33-39 and 42-47 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Jahnke et al. in view of Rice, and further in view of Perkins et al.; and claims 40 and 41 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Jahnke et al. in view of Rice, and further in view of Perkins et al. and further in view of Iwata et al. These rejections are traversed for at least the reasons given below.

Rice describes the general teaching of steam usage in a gas turbine as supplied by a steam turbine. While Applicant disagrees with the contention made in the Office Action that heat exchanger 103 of Jahnke et al. is part of his

coal gasification system, in any event it is clear that the output of Jahnke et al.'s heat exchanger 103 is not provided to any part of Janhke's gas turbine system (elements 75-79 in his Figure). Contrary to the statements made in the Office Action, one cannot contort the teachings of Rice to come up with the claimed invention. In Rice, steam is directly provided from his high and intermediate pressure steam turbines 38, 40 to different portions of his gas turbine 20. Steam is also provided from his low pressure steam turbine 42, whereby that steam is condensed by condenser 46 into water, in order to cool an exhaust portion of a power turbine. While steam is also provided (via the lines labeled F, G) from Rice's low pressure steam turbine 42 to different portions of Rice's gas turbine, that steam is not first condensed to water before being applied to the gas turbine. Also, the steam that is condensed to water, by way of condenser 46 in Rice's system, is not provided to a heat exchanger or to any part of Rice's gas turbine 20, and thus Rice teaches away from utilizing water (condensed from steam) to a heat exchanger or to a gas turbine.

Therefore, the Office Action has not provided a teaching of a condenser being provided between a steam turbine (of a steam turbine system) and a heat exchanger (of a coal gasification system), whereby water is supplied to a heat exchanger in a coal gasification system. Even if combinable, the combined teachings of Rice and Jahnke et al. would not teach the providing of water from a steam turbine system to a heat exchanger of a coal gasification system.

Thus, since the other cited art of record do not rectify the shortcomings of Rice, independent claims 1 and 33, as well as the claims dependent on these claims, are patentable.

Furthermore, with respect to dependent claim 3, that claim has been amended to clarify that a first portion of the steam from the heat exchanger (of a coal gasification system) is directly supplied from the heat exchanger to a gas turbine, as seen by the line 42 in Figure 1, for example, Claim 3 also recites that a second portion of the steam from the heat exchanger (of the coal gasification system) is first sent through a gas cleanup unit (element in Figure 1)

and then on to a gas turbine compressor (element 33 in Figure 1). Such features are not disclosed or suggested in any of the cited art of record.

Still further, with respect to independent claim 33, that claim recites that high-pressure air from an air compressor in a gas turbine system is supplied to cool the at least one high-temperature section of a gas turbine system if steam is not yet generated by the heat exchanger in a coal gasification system. Perkins et al., which is used in the rejection of claim 33, does not disclose or suggest any condition by which compressors 24 and 28 supply high pressure air. Also, Perkins et al. discloses that the air from compressors 24 and 28 is used as combustion supporting air in the combustor 10, and is not used to cool at least one high-temperature section of the gas turbine system, as recited in claim 33. The statements made in a previous Office Action concerning column 11, lines 58-63 of Jahnke et al. is not pertinent to the features recited in claim 33, since in claim 33 it is air from an air compressor that is provided to a gas turbine in order to cool a gas turbine, while the cited portion of Jahnke et al. merely describes the benefit extracting energy from hot exhaust gas leaving an expansion turbine.

Thus, independent claim 33 is patentable for this additional reason.

Applicants respectfully submit that the application is in condition for allowance, and entry and reconsideration based on the instant amendment and reply is earnestly solicited. Should the Examiner have any questions or suggestions regarding this application, the Examiner is invited to contact the undersigned attorney at the telephone number shown below.

Respectfully submitted,

November 5, 2002
Date

for Phillip J. Articola
Pavan K. Agarwal
Registration No. 40,888

Reg. No. 38,819

FOLEY & LARDNER
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5109
Telephone: (202) 672-5407
Facsimile: (202) 672-5399

Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge Deposit Account No. 19-0741 for any such fees; and applicant(s) hereby petition for any needed extension of time.

MARKED UP VERSION TO SHOW CHANGES

Marked-Up Claims:

3. (Four Times Amended) An IGCC according to claim 2, wherein said more than one high-temperature section of the gas turbine system is at least said gas turbine and a gas turbine combustor,

wherein a first portion of said [higher-temperature] steam from said heat exchanger is directly supplied from said heat exchanger in said coal gasification system to said gas turbine, and

wherein a second portion of said [higher-temperature] steam from said heat exchanger is first sent through a gas cleanup unit of said coal gasification system and then on to said gas turbine compressor.